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ABSTRACT

This study explored connections between perceived academic ability level, academic and social involvement, and interaction across race/ethnicity in informal campus situations. Data were obtained from the Cooperative Institutional Research Program 1987 freshmen survey and 1991 followup survey and the Higher Education Research Institute faculty survey scales on faculty perceptions of campus climate. The sample consisted of 4,138 White, African American, Latino, and Asian American students attending 291 four-year institutions. Students who rated themselves among the highest ability categories at college entry were more likely to enroll in honors programs, be elected to a student office, and become resident advisors. Students who rated themselves in the lowest and the middle categories of ability were more likely to be employed off campus, join a fraternity/sorority, and spend more time partying. Students who rated themselves as low ability were more likely to participate in intercollegiate sports and spend time socializing with friends. High ability students were more likely than medium and low ability groups to frequently dine, study, room with, and date someone of a different racial/ethnic background. Students who rated themselves in the lowest ability category were least likely to interact across race or ethnicity. (Contains 31 references.) (SW)

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Social Interaction on Campus: Differences Among Self-Perceived Ability Groups

by

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Jean Endo
Editor
AIR Forum Publications

Abstract

Social Interaction on Campus: Differences Among Self-Perceived Ability Groups

This study explores differences among students of various self-perceived ability levels with a focus on participation in formal student organizations and interaction across race/ethnicity. Although some aspects may be different for some groups, researchers find that high ability students are more likely to be involved in different student organizations than their peers and are also more likely to interact across race/ethnicity in informal social situations. The implications for improving student involvement among students of various ability levels and enhancing student interaction across race/ethnicity are discussed by the researchers.

Social Interaction on Campus: Differences Among Self-Perceived Ability Groups

Introduction

Higher education studies of student involvement and student development inform much of what we know about student interaction and student life on campus. Astin (1993) found that one of the most powerful influences of a student's development during college is the student's peer group. Research on student involvement in campus organizations, among the most important forms of peer groups on campus, indicates that these groups play a key role in the collegiate experience of students and that they are associated with multiple educational outcomes (Abrahamowicz, 1988; Astin, 1977; Striffolino & Saunders, 1989). Membership in student organizations is associated with involvement in academic and extracurricular activities, with increased positive interpersonal relationships with other students, faculty members and campus administrators and with higher levels of satisfaction (Abrahamowicz, 1988). Kuh (1993) connects involvement in out-of-classroom experiences with students' growth of skills and appreciation for relationships with persons of different backgrounds. Astin (1984), however, questions the impact certain kinds of involvement has on student interaction. Observing that students participating in honors programs may find themselves isolated from their peers, questions arise regarding whether academic ability might act as an unrecognized barrier to social interaction.

An enhanced understanding of how a student's self concept, as defined by academic ability, might affect his/her activity in organizations is needed as campuses attempt to increase student involvement. Moreover, how a student's membership in various affiliative groups affects the likelihood of his/her interacting across race needs to be examined because there is currently a high concern regarding campus race relations. While previous research has shown distinct racial differences in social interaction across

race (Hurtado, Dey & Treviño, 1994), we maintain that some of the major interaction patterns have to do with additional socially-constructed differences among groups. Specifically, self-perceived ability differences determine students' social interaction. That is, ability differences confer status and rewards to individuals in educational environments that, in turn, determine an individual's need to interact with someone of equal status. Minority students and White students may have different interaction rates across race, not solely because of racial, cultural, gender, or socioeconomic status differences, but because "invisible" social divisions based on perceived academic ability determine what peers are equal among social groupings.

The paucity of research among various forms of student involvement (i.e. types of student organizations), ability, and student interaction with someone of a different race/ethnicity led us to this investigation. Using theories of student involvement and intergroup relations, the objective of this study is to explore the connections between perceived academic ability level, academic and social involvement, and interaction across race/ethnicity in informal situations on campus. The results of this investigation may assist student activities programming, honors programs, and institutional researchers interested in diversity issues to examine the underlying patterns of differences among students that determine involvement on campus. Our goal is to provide some empirical evidence that may assist campus administrators in structuring programs that allow for more opportunities for interaction across race/ethnicity and ability groups.

Theoretical perspectives

College Involvement and Academic Ability

In Astin's theory of involvement (1985), the college environment is thought of as offering students a wide range of opportunities for engagement with others and their ideas. The nature and degree of student involvement in the campus environment can facilitate development and/or change. Research has shown that students involved with

their peers in a student organization were more cognizant of their responsibilities to their campus community, were less self-centered, and overall were more mature than students who were not involved (Williams and Winston, 1985). Abrahamowicz (1988) found that students participating in campus organizations appear to connect in unique ways with their institutions. This connection enhances student-to-student interaction, students' learning, and students' overall satisfaction with their college.

Researchers have also suggested that links exist between student involvement and achievement (Abrahamowicz, 1988; Astin, 1984, 1993; Kuh, 1991). Participation in student organizations seems to be connected to enhanced involvement in the overall college experience, which, in turn, results in a higher quality educational experience (Abrahamowicz, 1988). Astin (1984) defines a highly involved student as one who actively commits time and energy to both studying and participating in student organizations, and who regularly interacts with peers and faculty. Kuh (1991) describes high expectations for the performance of students at involving colleges, institutions which encourage active student participation. Research on whether high ability students are more likely than other students to be involved in student organizations is contradictory, however. Chickering and Reisser (1993) describe honors programs, which are typically comprised of high achieving students, as interactive communities. In contrast, Astin (1984) suggests honors programs isolate high ability students from their peers, and he calls for further research examining the connections between cocurricular involvement and academic achievement.

Astin (1993) links ability and involvement when he considers how various involvement and environmental characteristics affect students' college grade point averages (GPAs). For example, student-to-student interaction is positively associated with degree aspirations, college GPA, and graduating with honors. Students' academic development "seems to be facilitated if the student spends a considerable amount of time studying, attending classes, and using a personal computer, as well as engaging in

academically related activities that would be inclined to elicit a high degree of student involvement: honors courses, interdisciplinary courses, study-abroad programs, college internship programs, racial or cultural awareness workshops..."(Astin, 1993, p. 382). After input and environmental characteristics have been controlled for, students' GPAs have been positively linked with tutoring other students, the number of hours devoted to studying each week, and participation in an internship or study abroad program (Astin, 1993). A negative relationship has been found between college grades and degree of time spent partying, the number of hours spent reading for pleasure, and sorority and fraternity membership. These findings are all illustrations of how students' achievement outcomes are affected by their college involvement. What is still unclear from these extensive studies is how students' perceptions of their abilities shape their college involvement, which in turn, may determine a student's peer group during college and their proclivity to interact across race/ethnicity.

Self Perceptions of Ability and Interaction Across Race

Different forms of college involvement are linked with students' self concept, regardless of actual ability. For example, students' self ratings of their drive to achieve and their writing ability were positively affected by student-student interaction, fraternity and sorority membership, and participation in honors programs (Astin, 1993). What is as important to consider is how academic ability (or perceptions of ability) may affect involvement in student organizations and contribute to student interaction across race. Mitchell (1992) suggests high achieving students value learning for learning's sake and are more likely to actively seek new opportunities for learning, gaining insights, and understanding. Are high ability students then more likely than others to seek out opportunities for interaction across race and ethnicity as a means of enhancing their learning and broadening their understanding of themselves and others?

There are very few studies in the research literature that link students' ability (self-perceived or otherwise) and their interracial or interethnic peer involvement. Bennett and

Okinaka (1990) did test this idea in a series of analyses for African American, Latino, Asian American and White students. In this single institution study, Latino students' academic ability (as measured by registrar's data of students' high school GPAs and SAT scores) was a strong predictor of frequency with which students interacted interracially. The higher the Latino students' ability, the less likely they were to interact with members of other racial/ethnic groups. They also found that Asians and Latinos who persisted in college were more likely than nonpersisters to report positive interracial contact on campus. There was no difference in reports of interracial contact on campus between persisters and nonpersisters who were African American or White. In a somewhat contrasting multi-institutional study, Hurtado (1990) found that White students' higher academic self-concepts were associated with race-related behaviors during college. Specifically, White students with high academic self-concepts tend to frequently discuss racial issues and socialize with students of other racial/ethnic groups. However, African American and Chicano academic self-concept was not significantly associated with socializing across race/ethnicity in this study.

Smedley, Myers, and Harrell (1993) studied the stressors related specifically to minority first-year students' general well-being, psychological health and grade point averages in a predominantly White university. Chronic role strain is a main predictor of psychological distress, but the authors also found that achievement stresses (the degree to which students doubted their ability to succeed, felt less intelligent than others, and felt their academic background for college was inadequate), is the only minority status stressor scale that significantly predicted psychological distress and freshman year GPAs. Therefore, students of color in predominantly White college settings may contend with the general academic stresses and demands of college life, as well as doubts regarding their abilities. This finding is troubling given the fact that the African American, Chicano/Latino, and Pilipino students in the sample recorded high SAT scores, had strong high school GPAs, and were surveyed at the end of their first year in college. Did

the college environment increase the minority students' achievement stresses? Certainly, some contend that there is a great deal of social stigma associated with minority group membership that often translates into achievement stresses during college (Steele, 1992). African American, Chicano and White students also tend to perceive greater levels of racial/ethnic tension on campuses where they feel less valued by the faculty (Hurtado, 1992). Given the findings regarding racial/ethnic group differences and minority status stressors, it is important to control for the students' race/ethnicity when examining the question of social interaction by ability group.

Other Factors Affecting Intergroup Relations

Contact theory, the notion that prejudices are reduced when members of different groups interact under certain favorable conditions (Tzeng and Jackson, 1994), is a prevalent theory in social psychology and education. The concept of reducing prejudice and increasing students' understanding of one another by encouraging students of different groups to interact with each other more is an assumption that underlies many psychologists' and higher educational researchers' work (Kuh, 1991; Shoem, Zuñiga, and Lewis, 1981; Miracle, 1981;Astin, 1993). Allport (1954), however, explains that contact is not enough to reduce prejudice. In order to interact, groups need to be perceived to be of equal status, have goals in common, practice a system of interdependence, and be able to interact with the support of societal laws, customs and mores. Following Allport's logic then, individuals who hold membership in particular student organizations can be bridges across certain groups and start the process of reducing intergroup tension (Smith, 1989). In addition, Slavin (1985) developed a study designed to encourage interracial friendships based on Allport's early theories and found that elementary and secondary students who participate in structured cooperative learning activities tend to form intergroup friendships, but it is still not known whether individuals continue to interact across race/ethnicity after educational interventions. The latter study suggests, however, that administrators and faculty can structure situations where students from different

racial/ethnic groups can have common goals, practice interdependence, and interact with their support.

Equal status as a condition for intergroup contact is difficult to achieve, however, in educational environments because our higher education institutions tend to reward or confer additional benefits to students who enter college with well-developed academic skills (Astin, 1994). These benefits include special recruitment enticements, academic programs, and academic criteria for involvement in special programs and activities. Moreover, the lack of an adequate representation of minorities on campus may serve to enhance stereotypes in environments where these groups were previously excluded. That is, proportions of socially and culturally different people are critical in shaping the dynamics of social interaction (Kanter, 1977). Thus, the structural diversity (or lack of diversity) influences intergroup relations because it contributes to social group perceptions. At the same time that better representation may reduce prejudice, there is research that contend that higher proportions of minorities can sometime result in group conflict. Longshore's (1983) study of racial attitudes and climate perceptions finds that the structure of school (e.g. staff racial composition and classroom desegregation) can make a difference with respect to the intergroup relations in a school setting: "Whites seem less favorable toward Black students in racially balanced schools" (p. 155). Blalock (1967) further states that when the numbers of minority group members increase, racial tension also increases because majority group members may find themselves competing for similar resources. These studies suggest that there may be different effects on the nature of interracial/interaction depending on the proportion of White students and students of color on campus.

Although campus race relations can significantly affect minority student involvement on a campus (Allen, 1988), we also suggest that the campus involvements that students choose may determine the extent to which they interact across race/ethnicity. For example, some suggest that participation in racially-focused academic

and social activities such as participation in a racial/ethnic student organization tends to diminish interaction across race on campus (Rooney, 1985). From the perspective of minority students, these organizations are key activities that represent modes of cultural support (Loo and Rolison, 1986). We test this assumption regarding interracial interaction for students involved in these organizations but also examine whether other specific types of campus involvements may hinder or facilitate further interaction across race.

Method

Data Sources

The data used for this study were collected by the Cooperative Institutional Research Program (CIRP), sponsored by the American Council on Education (ACE) and the Higher Education Research Institute (HERI) at the University of California, Los Angeles. The 1987 CIRP freshman survey was administered to first year students during their first few weeks of college. The first year survey covers a range of student background characteristics, attitudes, goals, and expectations for college. A follow-up survey was administered in 1991 in order to assess a wide range of college student experiences, perceptions of their college environment, and outcomes fours year after college entry. Student background characteristics were drawn primarily from the 1987 freshman survey and information about their college experiences and activities were drawn from the 1991 Follow-up Survey. The response rate for this longitudinal survey was approximately 30%; however, to minimize the possibility of non-response bias, the data were statistically adjusted for non-response. Because each institution had different response rates, response weights were developed based on the large amount of information on the freshman survey that was available on nonrespondents for each institution (see a discussion of weighting methodology in Dey, Astin & Korn, 1991). Response weights were then adjusted for each of the self-perceived ability groups by taking the total response weight and dividing it by the average response weight for each group. The latter adjusment was necessary to obtain correct standard errors for

coefficients and significance tests for each ability group. This ensured that we had correct distributions, that minimize response bias, on all variables without increasing our sample size.

In addition to longitudinal data on students, two other sources of data were used in this study. HERI conducted a survey of faculty and administrators in 1989-90; the response rate to the faculty survey was approximately 50% (see Astin, Korn, & Dey, 1991). Only the scales of faculty perceptions of campus climate, aggregated by institution, were taken from the faculty survey. These faculty data were merged with the longitudinal student data file as were college structural characteristics, which were derived from the United States Department of Education's Integrated Postsecondary Data Systems (IPEDS) data.

Sample

The sample chosen for our analyses include only White, African American, Latino, and Asian American students attending four-year institutions, who did not leave or transfer from their first-year institution. Students at specific kinds of institutions were excluded from the study. Because rooming with another student was one of the items that constituted our dependent variable, we limited our analyses to four-year colleges and universities. However we also excluded students attending institutions that were least likely to have a diverse student population on the assumption that this significantly influences opportunities for interaction across race/ethnicity. Therefore, students attending predominantly black institutions as well as students who attended institutions that were over 98 percent White were excluded from the study. Finally, we excluded a small number of students who had missing data on the dependent variable, the crossrace interaction measure, and on the freshman self-rated academic ability measure. Mean replacements by ability category on all other measures were used as a technique of maximizing the numbers of students for multivariate analysis. The final sample consists of 4,138 college men and women attending approximately 291 different institutions.

Measures and Analyses

Table A-1 shows the scales and definitions of all the measures used in our analysis. Four scales—crossrace interaction, social change orientation, experienced discrimination, and increased tolerance—were developed from factor analyses, utilizing the principal axis factoring and oblimin rotation methods. Reliabilities of the scales ranging from an alpha of .67 to .80 were computed on each of the scales. Items that compose each of the new factor scales developed for this study are detailed in Table A-2.

Self-perceived ability is defined by students' self-rating of their mathematical ability, academic ability, intellectual self-confidence, and writing ability in comparison to others in the first year of college. To determine any initial differences with respect to the ability groups' interactions across race/ethnicity, chi-square analyses were completed by each of the measures comprising the crossrace interaction scale. The crossrace interaction scale is composed of four survey items that measure the frequency with which students studied, dined, dated, or roomed with a person from a race or ethnicity that is different from their own. (The actual survey items for the scale are shown on Table A-2). In addition, ability group mean differences on each of the variables in the regression models were assessed through T-tests.

Multiple regression analyses predicting students' crossrace interactions were completed separately by ability group and independent variables were forced entered in a hierarchical fashion in seven blocks. Variables were entered in blocks to determine the relative contribution of each set of variables to the overall R-square. The first block of variables are background characteristics: gender, ethnicity, citizenship, parents' education and income, likelihood that students will be satisfied with their first-year college, likelihood that student will make a "B" average, is this the student's first choice of institution, and the student's social change orientation.

The second block of variables in the regression model consists of the distance of the institution from the student's home, the percent of total budget the institution spends on

student services, institutional control, structural diversity (percentage of White students in the undergraduate population), selectivity, and size. The third block of variables are faculty climate scales developed in Astin (1993) that were merged with student data. These climate measures represent the faculty's views of the climate at each institution, including the institutions' diversity emphasis, faculty's relations with the administration, racial conflict at the institution, and the college or university's student-centeredness.

The fourth block of variables include two student perceptual measures of the environment: to what extent did students feel they experienced discrimination at their college campus, and to what extent did they feel their tolerance for others increased during college. Academic involvement variables were entered next in the regression model. Measures included how often students studied with other students, college grade point average, if students participated in a study abroad program, participated in an internship program, worked on a professor's research project, enrolled in a Women's studies course, enrolled in an Honor's program, enrolled in an Ethnic Studies course, and attended a racial/cultural workshop.

The last two blocks of variables in the regression model include students' organization and work involvement and their time spent in various activities. Included in the sixth block are students' participation in ROTC, as a resident advisor, in a Greek organization, on- or off-campus employment, participation in intercollegiate sports, election to a student office, campus demonstrations and participation in racial/ethnic student organizations. Finally, variables in the model representing time spent in the following activities were entered as the seventh block: religious activities, socializing with friends, talking with faculty outside of class, clubs or groups, studying, exercising or sports, and partying.

---Place Table 1 about here---

Results

Tests of significance reveal distinct differences in background characteristics and the college experiences of students who enter college with different levels of self-rated ability. We have chosen to highlight only a few of the clear patterns that distinguish each of the groups. Refer to Table 1 for results of tests conducted on each of our variables. In terms of background variables, it appears that women are more likely to rate themselves in the low or medium ability group. In addition, high ability students are more likely to come from families with higher parental education and income. At the same time, however, high ability students are more likely than students in the other categories to report values that reflect a social change orientation.

As we might expect, high ability students are most likely to attend a large or selective institution and travel further away from home to attend college than low or medium ability students. Low and medium ability students are more likely to attend a college with a high percentage of White students as well as institutions where faculty report a student-oriented educational environment. In contrast, high ability students are more likely to attend a college where faculty report there is a high degree of racial conflict on campus. And yet, data show that the high ability students are most likely to admit self-reported growth in the area of increased tolerance for others during college.

College involvement differs significantly for each of the self-rated ability groups. For example, students who rate themselves in the highest ability group are more likely to enroll in an honors program, participate in campus demonstrations, be elected to student office, and become a resident advisor. These findings are not surprising as some of these student activities depend on maintaining high grades for participation. In addition, high ability students are more likely to participate in racial/ethnic student organizations, enroll in an ethnic studies course, and attend a racial/cultural awareness workshop.

Low and high ability students in our sample are both more likely to participate in a study abroad program than medium ability students. Low and medium ability students are

more likely to be employed off-campus, join a fraternity or sorority, and spend more time partying than high ability students. Low ability students are more likely to participate in intercollegiate sports and spend more time socializing with friends. Medium ability students are more likely to participate in an internship program, be employed full-time, and spend time in religious services.

In terms of our dependent variable, overall we find students who rated themselves in the highest ability category are more likely to report interacting with someone from a racial/ethnic background different from their own. Medium ability students are also more likely to interact across race/ethnicity than students who rated themselves in the lowest ability category.

These average differences are confirmed in subsequent chi-square tests for each of the items that compose our dependent variable. Figure 1 shows the frequency with which students in each of the ability categories participated in studying, dining, rooming, or dating someone from a different racial or ethnic group. Each of the chi-square tests confirm a significant relationship between self-rated ability and participation in informal interaction across race/ethnicity. Specifically we find that students who rated themselves in the highest ability category are more likely than other students to study, dine, room, or date someone with a background different from their own. In contrast, we find that students in the lowest ability category are least likely to engage in any of these activities across race/ethnicity.

--- Place Figure 1 about here---

Table 2 shows the results of our regression models for each of the self-rated ability groups. Our multivariate model accounted for 38 percent of the variance in the dependent variable for the low ability group, 28 percent of variance for the medium ability, and 36 percent of the variance for the high ability group. It appears as if the model captures variation in student interaction across race, somewhat more accurately, for

students who reported at college entry that their academic skills were either much lower or higher than their peers. Overall, the entry of different significant variables into the equation (taking into account sample size differences) suggests that students' freshman academic self-rating plays a definitive role in shaping college involvement and interaction across racial/ethnic groups. At the same time, however, there are many predictors that had similar significant effects across the self-rated ability groups. These similarities and differences across groups are highlighted in three general sections that follow.

---Place Table 2 about here---

Student Background Characteristics

Very few of the student background characteristics measured in the study show significant influences on interaction across race during college. For example, it is interesting to note that parental education and income are not significant predictors of interaction across race for any of the ability groups. However, among the racial/ethnic groups in our study, White students are significantly less likely to interact with someone from a different racial/ethnic background. Specifically, they are significantly ($p < .001$) less likely than Asian Americans (the referent category) to interact across race/ethnicity. This finding held true for White students regardless of their perceived academic ability. African Americans in the high and medium ability groups are also significantly less likely to interact across race than Asian Americans ($p < .001$ and .05, respectively). In contrast, Latino students across all ability groups are not significantly more or less likely to interact across race than Asian Americans. Students who rated themselves in the lowest ability category and who are not citizens of the U.S. are more likely to report interacting across race/ethnicity. In addition, students in the medium ability group who reported having a social change orientation, or interest in helping their community, were more

likely to interact with someone from a racial/ethnic background different from their own. The latter two findings were significant for only one ability group, however.

College Structural Characteristics and Climate Measures

As one might expect, one of the strongest college structural determinants of interaction across race/ethnicity is the proportion of White students on a college campus, or the lack of racial/ethnic enrollment diversity. Across all ability groups, the proportion of White students is a significant ($p < .001$) negative predictor of student interaction across race/ethnicity. Only one other measure has such a uniform, but opposite, effect across ability groups. The level of selectivity of the college is positively associated with interaction across race/ethnicity, with significance at the .001 level among high and medium ability groups and the significance at the .05 level among the lowest ability category. The distance of the freshman college from home is also a significant predictor of interaction across race/ethnicity for medium ability students. Most of the faculty climate measures showed no significant effect on student interaction across race, with only one exception. Medium ability students are somewhat less likely to interact across race/ethnicity on campuses that faculty perceived to be student-centered. This latter finding is not as strong an effect as other college measures (significant at the .05 level for only the medium ability group), however.

College Involvement Measures

Student perceptions of their own experiences show strong significant relationships with interaction across race/ethnicity. Across all ability groups, student-reported growth in tolerance of others during college is positively associated with interaction with someone from a different racial/ethnic background. Reported experiences of discrimination or exclusion are also positively associated with interaction across race. These both represent important student experiences that may increase interracial interaction or may be a direct result of increased interaction across race/ethnicity.

While there is some causal ambiguity with these variables, there is somewhat less causal ambiguity with regard to other student experience measures. Students were asked to report most of these activities for the year previous to the administration of the survey. Only one involvement measure shows a positive, significant relationship with interaction across race/ethnicity for all ability groups ($p < .001$). This activity is the frequency with which students engaged in study with other students. Other academic involvements were significant only for the medium ability group. Enrollment in an honors program ($p < .001$) and, to a lesser extent, enrollment in an ethnic studies course ($p < .05$) are both positively associated with interaction across race/ethnicity. However, controlling for those enrolled in an honors program, medium ability students who earned higher grades are less likely to interact across race.

None of the other college or work involvement measures had uniform effects across all groups, indicating that each ability group engages in different activities that shape their social lives on campus. For both high and medium ability groups, however, participation in an racial/ethnic student organization is positively associated with interaction across race. Part-time employment on campus was positively associated with interaction across race for both high and low ability groups. However, part-time employment off campus had distinctly opposite effects on crossrace interaction for two groups: low ability students are more likely to interact across race, while high ability are less likely to interact across race if they are employed part-time off campus. Presumably, there are differences in the types of jobs the two groups may take that places them in an environment where there are different opportunities to interact across race/ethnicity.

Among the activities for low ability students, perhaps one of the most important determinants of interaction across race is the frequency with which students talk with faculty outside of class ($p < .001$). Time spent exercising, or in sports, and participation in the ROTC is also associated with interaction across race. Medium ability students who spent time exercising or in sports and talking with faculty outside of class also are more

likely to interact more across racial/ethnic boundaries. In contrast, medium ability students who reported spending a lot of time at religious services or partying are less likely to report frequent interaction across race/ethnicity.

Discussion

While previous literature has established that college involvement can significantly contribute to student achievement outcomes (Astin, 1993; Kuh, 1993; Abrahamowicz, 1988), we have found evidence to support the notion that the nature of social interaction on campus is linked with student perceptions of their own ability as they enter college. Relatively "invisible" social divisions, based on perceived ability in the early stages of their college experience, determine the nature of peer associations and involvement in college. The study demonstrated distinct differences among low, medium, and high self-perceived ability groups regarding their college involvement and tendency to interact across race and ethnicity in informal situations.

Specifically, students who rate themselves among the highest ability categories at college entry are more likely to enroll in an honors program, be elected to a student office, and become a resident advisor. Students who rated themselves in the lowest and the middle category of ability are more likely to be employed off campus, join a fraternity or sorority, and spend more time partying. Low ability students are more likely to participate in intercollegiate sports and spend time socializing with friends. These findings suggest that particular student activities tend to have clusters of students with similar perceptions of their academic ability. Linking academic programming with specific student organizations or activities (e.g. intercollegiate sports, fraternities and sororities) might be one way to enhance academic self-concept and student performance.

There is also a distinct relationship between self-perceived ability and campus race relations. High ability students are more likely to attend a college where faculty report a climate of racial conflict, and yet these students are still most likely to indicate

self-reported growth in the area of increasing tolerance for others during college. They are also more likely than medium and low ability groups to frequently dine, study, room with and date someone of a racial/ethnic background. Students who rated themselves in the lowest ability category were least likely to interact across race or ethnicity. This may be because these students feel the most vulnerable in an educational environment and therefore are least likely to take the risk to interact with someone from a different race or ethncitiy. Or, as Mitchell suggests (1992), students who are academically self-confident are more likely to seek new learning opportunities which include people of other races and cultures.

Several college involvements appear to lead to greater interaction across race, but very few measures had uniform effects for each of the ability group categories. Part-time employment on campus was positively associated with interaction across race/ethnicity for both high and low ability groups, presumably because such jobs require greater interaction with a variety of individuals on campus. Low ability students who spent more time exercising or in sports, in ROTC, or working off campus tended to interact more across race/ethnicity. We found no evidence to support the idea that honors program students are more racial/ethnically isolated from other students (Astin, 1984). For medium ability students, in fact, participation in an honors program was as strong predictor of interaction across race/ethnicity. Simply making high grades, however, was negatively linked to involvement across race for this group and we venture to guess it is associated with lower overall social interaction. Contrary to the belief that racially-focused organizations are racial/ethnically isolating (Rooney, 1985), we found that participation in a racial ethnic student organization can lead to enhanced interaction across race for both high and medium ability groups. Moreover, we found that students who reported experiences of discrimination were more likely to have interacted informally across race/ethnicity. It may well be that increased racial contact on campuses

can lead to some conflict (Blalock, 1967), but it is important to note that this does not appear to diminish the likelihood of social interaction on college campuses.

Do students naturally seek peers of the same ability or does the college structure activities that lead to a form of higher education "tracking" of ability groups on campus? Although researchers suggest that students seek contact with peers they perceive to be of equal status (Astin, 1993; Allport, 1954), part of the answer to this question may depend on the college. We suspect that both dynamics are occurring. For example, students will naturally seek peer groups with whom they feel most comfortable. Yet, certain college activities or programs are restricted to high ability groups or require that students demonstrate high academic achievement. This includes entry into particular college majors, student leadership programs, paraprofessional positions (resident advisor, peer advising), enrollment in honors courses, and often election to student office. Thus, some of the benefits of specific college involvement opportunities are not readily made available to students who do not feel as secure about their academic abilities. We suggest that student affairs administrators examine their programs and policies to assess whether they might contribute to further distinctions among ability groups by rewarding or creating special opportunities for some groups and not others. Increasing the involvement of students who feel the most vulnerable or excluded, academically and socially, may improve student satisfaction and retention.

Faculty can also create more opportunities for students to interact across race/ethnicity and ability group. One of the key findings of the study is that key academic involvements lead to more frequent informal socializing across race/ethnicity. Students from all ability groups who frequently studied with other students were more likely to interact across race/ethnicity. This finding strongly suggests that cooperative learning activities, inside and outside the classroom, can lead to intergroup friendships (Slavin, 1985). In addition, low ability students were more likely to interact across race/ethnicity if they frequently talked with faculty outside of class. While these low ability students

may be more inclined to take risks by engaging faculty and students of other races, the finding does suggest that interactions with faculty can have a definitive impact on intergroup relations. Faculty can help structure opportunities to promote relations across race, ethnicity, and ability levels beyond the classroom. Such activities might include the development of topical study groups, requiring group projects as part of their evaluation of student work, or creating a community service component for their classroom material.

Interaction across race cannot occur, however, without continued progress toward improving the structural diversity of campuses. High proportions of White students, or the lack of racial/ethnic diversity, significantly inhibits interaction across race/ethnicity regardless of ability group. At an individual level, we also found that White students (regardless of ability) are less likely to report interacting informally across race/ethnicity. In contrast, we found that students at selective institutions were more likely to report interaction across race/ethnicity. This may be because such institutions, while academically exclusive, also tend to have the resources to provide more opportunities for interaction on campus in the form of residential programming and offer an extensive array of academic and cultural opportunities.

Implications for Institutional Research

Until we understand more about how students spend their time during college, we may not be able to increase student participation significantly to assist those students who may feel the most vulnerable in college. Because student involvement is so important for retaining students, institutional researchers can play a key role in obtaining a complete portrait of the the campus climate for student involvement. Researchers would do well to consider investigating participation in college activities and assess student involvement by student ability group, using self-perceptions as well as measures of actual performance. Although this multi-institutional study showed no significant social isolation of high or low ability students, it is important to examine this issue to ensure this is not occurring on individual campuses.

Classroom assessments may also be conducted to assess activities that not only enhance student cognitive development but also contribute to student development in other areas. In this case, researchers might consider investigating how collaborative classroom activity promotes social development, improves students' tolerance for others, and increases interaction across race/ethnicity. The general assumption has been that there is quite a bit of racial segregation on campus. This study reveals that there is a good deal of interaction across race/ethnicity linked with specific academic and social involvement on campus. Institutional researchers engaged in developing assessments of campus diversity, should include student perceptions of the climate, as well as actual behavioral measures or reports of interaction across race/ethnicity to adequately assess the extent of social interaction on campus. Such assessments are useful in determining areas for institutional improvement for student satisfaction and success.

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Table 1. Descriptive Statistics for Student and Institutional Characteristics by Ability

	Low Ability (n=1214)		Middle Ability (n=1946)		High Ability (n=1023)		Significant Mean Differences		
	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Low/Med	Low/High	Med/High
Student Background Characteristics									
Gender (female=2)	1.470	.499	1.394	.489	1.277	.448	***	***	***
White	1.904	.295	1.917	.277	1.870	.336		*	***
African American	1.047	.212	1.031	.173	1.058	.235	*		***
Latino	1.027	.162	1.017	.130	1.019	.136			
Citizen	2.975	.216	2.984	.163	2.987	.160			
Father's Education	5.367	2.009	5.557	1.963	5.975	1.931	*	***	***
Mother's Education	4.908	1.887	4.848	1.771	5.273	1.821		***	***
Parent's Income	8.655	3.062	8.974	3.092	9.126	3.073	**	***	
Likelihood of making at least "B" average	3.133	.564	3.448	.558	3.708	.470	***	***	**
Likelihood of being satisfied with college	3.406	.586	3.562	.544	3.631	.557	***	***	***
Choice of college	3.551	.724	3.589	.725	3.570	.764			
Social change orientation	10.989	2.705	11.186	2.877	11.756	2.989		***	***
College Structural Measures									
Distance from home	4.108	1.341	4.219	1.328	4.503	1.276	*	***	***
Student Services Expenditures	8.036	3.454	7.724	3.926	7.556	4.933	**	**	
Institutional control (Private=2)	1.631	.465	1.611	.467	1.591	.475		*	
Pctwhite	.881	.089	.878	.090	.857	.101		***	***
Selectivity	957.079	85.819	1003.399	101.564	1059.949	120.805	***	***	***
Size	5949.490	7955.517	6649.061	7601.326	7379.930	8039.315	**	***	**
Faculty Climate Measures									
Diversity Emphasis	119.388	10.997	119.891	10.659	120.397	11.546			
Relations with administration	337.563	97.011	329.443	96.596	334.834	98.191			
Racial Conflict	127.867	53.181	140.963	54.450	148.438	57.709	***	***	*
Student Orientation	144.817	14.885	140.461	14.915	138.018	15.825	***	***	*
Student Perceptions									
Increase in tolerance of others	11.785	1.994	11.814	2.028	11.898	2.138			
Experienced Discrimination	4.634	1.055	4.654	1.156	4.821	1.273		***	***
Academic Involvement Measures									
How often: studied with other students	2.27	.644	2.30	.631	2.30	.633			
College GPA	3.768	.956	4.123	.980	4.490	1.082	***	***	***
Study abroad Program	1.122	.328	1.096	.294	1.128	.334	***		**
Internship Program	1.267	.443	1.284	.451	1.244	.430			*
Worked on professor's research project	1.107	.310	1.160	.367	1.227	.419	***	***	***

Enrolled in Women's studies course	1.195	.397	1.140	.347	1.126	.332	***	***	
Enrolled in Honors program	1.195	.396	1.334	.472	1.489	.500	***	***	***
Enrolled in Ethnic Studies course	1.227	.419	1.228	.420	1.276	.447			
Attended racial/cultural workshop	1.194	.395	1.203	.402	1.324	.468			
Student Organization and Work Involvements									
ROTC	1.040	.196	1.038	.191	1.050	.219			
Resident Advisor	1.077	.266	1.072	.258	1.096	.295			*
Fraternity or Sorority	1.262	.440	1.306	.461	1.222	.416		**	***
Full-time job	1.121	.326	1.129	.335	1.096	.294			**
Intercollegiate Sports	1.335	.472	1.295	.456	1.306	.461	**	*	
Elected to student office	1.164	.370	1.200	.400	1.271	.445	**	***	***
Part-time job off campus	1.632	.482	1.607	.488	1.547	.498		***	**
Part-time job on campus	1.444	.497	1.495	.500	1.573	.495	*		***
Campus Demonstrations	1.204	.403	1.185	.388	1.240	.428		*	***
Racial/ethnic student organization	1.069	.254	1.092	.289	1.142	.350	*	***	***
Time Spent									
Religious services	2.012	1.090	2.075	1.117	1.954	1.071			**
Socializing with friends	6.004	-1.495	5.894	1.585	5.860	1.503	**	**	
Talk with faculty outside of class	2.412	1.029	2.482	.968	2.502	.907	*	**	
Clubs or groups	2.737	1.645	3.032	1.798	3.104	1.661	**	***	
Studying or doing homework	5.240	1.662	5.531	1.674	5.831	1.781	**	***	***
Exercising or sports	4.387	1.637	4.265	1.512	4.266	1.571	**	***	
Partying	4.178	1.830	3.966	1.850	3.619	1.787	**	***	***
Dependent Variable									
Crossrace interaction	6.600	2.000	6.750	1.851	7.211	1.962	*	***	***

Note * p =≤ .05; p= ≤ .01; *** p= ≤ .001.

Figure 1. Interaction Across Race/Ethnicity by Self-Perceived Ability Group

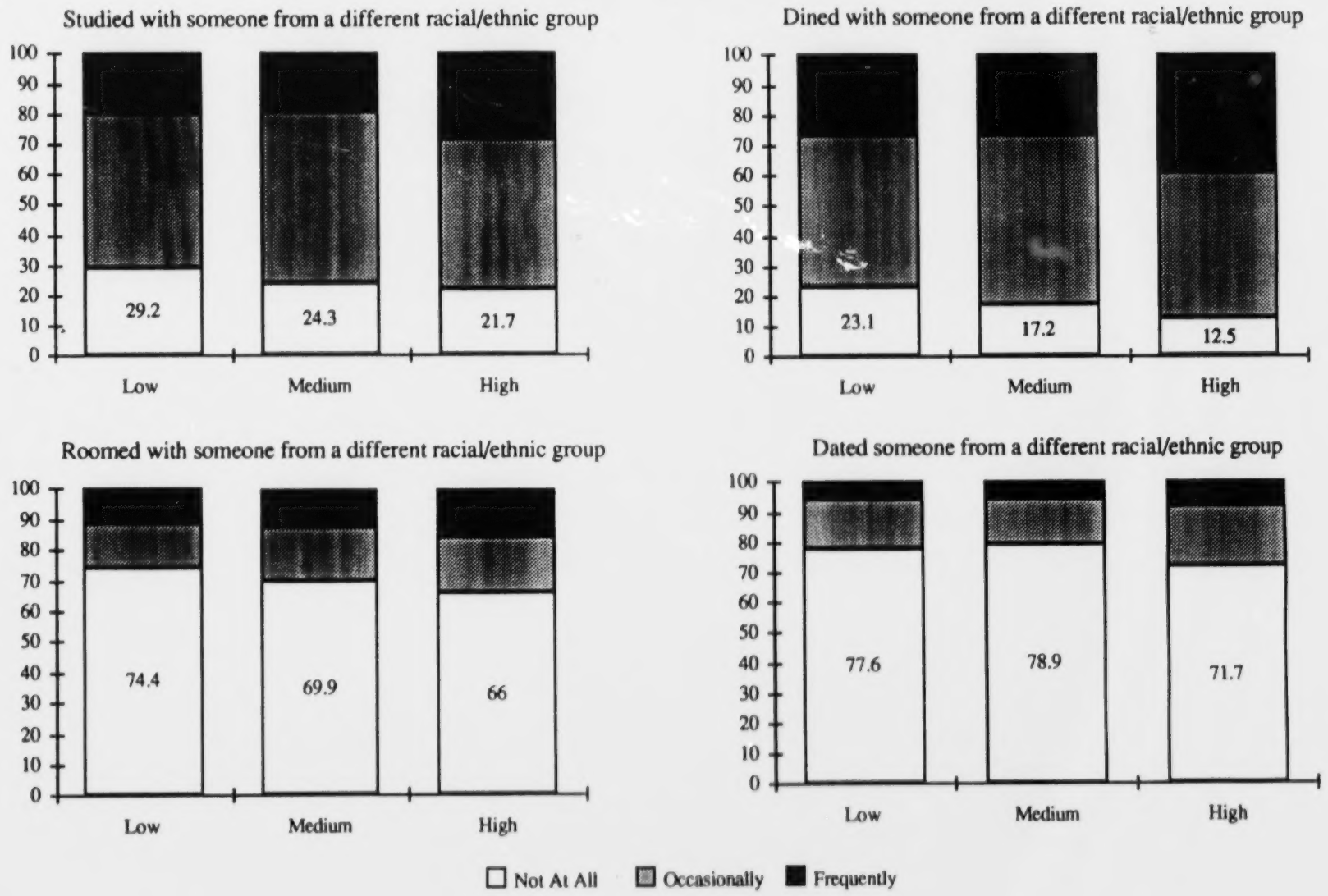

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Table 2. Regression of Background, Institutional, and Involvement Measures on Crossrace Interaction

	Low Ability (n=1214)		Medium Ability (n=1946)		High Ability (n=1023)	
	b	B	b	B	b	B
Student Background Characteristics						
Gender (Female=2)	.05	.01	.04	.01	.11	.03
White	-2.45	-.36***	-1.84	-.28***	-1.67	-.29***
African American	.10	.01	-.70	-.07*	-1.29	-.15***
Latino	.42	.03	-.47	-.03	.27	.02
Citizen	-.53	-.06*	.07	.01	-.42	-.03
Father's Education	.05	.05	.01	.01	.03	.03
Mother's Education	.01	.01	-.02	-.02	.06	.06
Parents' Income	-.02	-.03	-.00	-.00	.02	.04
Likelihood of being satisfied with college	-.13	-.04	.09	.03	-.09	-.03
Likelihood of making a "B" average	.01	.00	-.05	-.01	.14	.03
Choice of college	-.06	-.02	-.05	-.02	.09	.03
Social Change Orientation	.02	.03	.03	.05**	-.00	-.01
College Structural Characterics						
Distance from home	.07	.05	.14	.10***	.07	.05
Student Services Expenditures	.01	.02	.00	.01	-.00	-.01
Institutional Control (Private=2)	.30	.07	.08	.02	-.13	-.03
Pctwhite	-3.30	-.15***	-1.64	-.08***	-3.69	-.19***
Selectivity	.00	.07*	.00	.09***	.00	.15***
Size	.00	.03	-.00	-.06	-.00	-.06
Faculty Climate Measures						
Diversity Emphasis	.01	.05	.01	.03	-.00	-.02
Relations with administration	-.00	-.08	.00	.03	-.00	-.05
Racial Conflict	-.00	-.04	-.00	-.02	-.00	-.04
Student Orientation	.01	.04	-.01	-.10*	-.01	-.05
Student Perceptions						
Increase in tolerance of others	.11	.11***	.07	.08***	.14	.15***
Experienced Discrimination	.14	.07**	.11	.07***	.11	.07*
Academic Involvement Measures						
How often: studied with other students	.35	.11***	.27	.09***	.43	.14***
College GPA	.03	.01	-.16	-.08***	-.11	-.06
Study Abroad Program	.23	.04	-.13	-.02	-.16	-.03
Internship Program	-.07	-.02	.09	.02	-.05	-.01
Worked on professor's research project	-.19	-.03	.11	.02	-.10	-.02
Enrolled in Women's Studies course	-.16	-.03	.02	.00	.08	.01
Enrolled in Honors Program	-.07	-.01	.28	.07***	.17	.04
Enrolled in Ethnic Studies course	-.20	-.04	.20	.04*	.14	.03
Attended a racial/cultural workshop	.19	.04	.18	.04	.09	.02
Student Organization and Work Involvements						
ROTC	.58	.06*	-.03	-.00	.22	.02
Resident Advisor	-.18	-.02	-.20	-.03	-.06	-.01
Fraternity or Sorority	-.12	-.03	-.15	-.04	.04	.01
Full-time job	.23	.04	.04	.01	.24	.04
Intercollegiate Sports	.13	.03	.10	.02	.19	.04
Elected to student office	-.18	-.03	-.03	-.01	.12	.03
Part-time job off-campus	.23	.06*	.10	.03	-.36	-.09**
Part-time Job on-campus	.26	.06**	.14	.04	.35	.09**
Campus Demonstrations	.21	.04	.18	.04	.01	.00
Racial/ethnic student organization	.14	.02	.83	.13***	.36	.06*
Time Spent in Activities						
Religious services	-.00	-.00	-.07	-.05*	-.04	-.02
Socializing with friends	-.01	-.01	.06	.05	.06	.05
Talk with faculty outside of class	.19	.10***	.09	.05*	.06	.03

Clubs or groups	.03	.03	-.01	-.01	.02	.01
Studying or doing homework	-.05	-.05	.03	.03	.01	.01
Exercising or sports	.09	.07**	.11	.09***	.06	.05
Partying	-.05	-.05	-.08	-.08**	-.04	-.04
R square	.38		.28		.36	

Note: B represents standardized regression coefficients.
indicates * = ≤ .05; ** p = ≤ .01; *** p = ≤ .001.

Table A-1. Measures and Scales

Student Background Characteristics	
Gender	Dichotomous: 1=male; 2=female
Race/Ethnicity	Dichotomous: White, African American, Latino, Asian (referent group)
Citizenship	Dichotomous: 1= Permanent resident or not a citizen; 2=citizen
Father's Education	1=grammar school to 8=graduate degree
Mother's Education	1=grammar school to 8=graduate degree
Parents' Income	1=less than $6,000 to 14=$150,000 or more
Likelihood of making at least a "B" average	1=no chance to 4=very good chance
Likelihood of being satisfied with college	1=no chance to 4=very good chance
Choice of college	1=less than third choice to 4=first choice
Social Change orientation	Scale Items in A-1
College Structural Measures	
Distance from home	1=5 or less to 6=more than 500 miles
Student services expenditures	Percentage of total expenditures
Institutional control	Dichotomous: 1=public; 2=private control
Percent white	Percentage white enrollment
Selectivity	Average SAT scores of entering freshmen
Size	Total undergraduate enrollment
Faculty Climate Issues	
Diversity Emphasis	See Astin (1993)
Relations with administration	See Astin (1993)
Racial conflict	See Astin (1993)
Student orientation	See Astin (1993)
Student Perceptions	
Increase in tolerance of others	Scale Items in A-1
Experienced discrimination	Scale items in A-1
Academic Involvement Measures	
How often: studied with other students	1=not at all to 3=frequently
College GPA	1=C to 6=A
Student abroad program	Dichotomous: 1=no; 2=yes
Internship Program	Dichotomous: 1=no; 2=yes
Worked on professors; research project	Dichotomous: 1=no; 2=yes
Enrolled in Women's Studies course	Dichotomous: 1=no; 2=yes
Enrolled in Ethnic Studies course	Dichotomous: 1=no; 2=yes
Enrolled in Honors program	Dichotomous: 1=no; 2=yes
Attended racial/cultural workshop	Dichotomous: 1=no; 2=yes
Student Organization and Work Involvement	
ROTC	Dichotomous: 1=no; 2=yes
Resident Advisor	Dichotomous: 1=no; 2=yes
Fraternity or Sorority	Dichotomous: 1=no; 2=yes
Full-time job	Dichotomous: 1=no; 2=yes
Intercollegiate Sports	Dichotomous: 1=no; 2=yes
Elected to student office	Dichotomous: 1=no; 2=yes
Part-time job off campus	Dichotomous: 1=no; 2=yes
Part-time job on campus	Dichotomous: 1=no; 2=yes

Campus demonstrations	Dichotomous: 1=no; 2=yes
Social/ethnic student organization	Dichotomous: 1=no; 2=yes
Time Spent	
Religious services	1=0 to 8=more than 20 hours
Socializing with friends	1=0 to 8=more than 20 hours
Talk with faculty outside of class	1=0 to 8=more than 20 hours
Clubs or groups	1=0 to 8=more than 20 hours
Studying or doing homework	1=0 to 8=more than 20 hours
Exercising or sports	1=0 to 8=more than 20 hours
Partying	1=0 to 8=more than 20 hours

Table A-2. Factors Used in Analyses

Factors and Survey Items	Factor Loading	Internal Consistency (Alpha)
Academic Ability Self Rating		**.67**
Academic Ability	.86	
Mathematical Ability	.50	
Intellectual Self-Confidence	.59	
Writing Ability	.39	
Interacted Across Racial/ethnic Groups		**.70**
Dined with someone from a different racial/ethnic group	.77	
Studied with someone from a different racial/ethnic group	.73	
Had a roommate from a different racial/ethnic background	.49	
Dated someone from a different racial/ethnic background	.43	
Experienced Discrimination/Exclusion		**.61**
Was insulted because of background	.68	
Felt excluded from school activities because of background	.65	
Pressured not to socialize across race	.44	
Heard faculty make inappropriate remarks regarding minorities	.34	
Self Rating of Tolerance		**.80**
Tolerance of persons with different backgrounds	.81	
Acceptance of people from different races/cultures	.77	
Cultural awareness and appreciation	.64	
Social Change Orientation		**.76**
Participate in community action program	.74	
Promote racial understanding	.68	
Involvement in environmental cleanup programs	.58	
Develop meaningful philosophy of life	.55	
Help others in difficulty	.52	